Volume Title: Labor Markets and Firm Benefit Policies in Japan and the United States

Volume Author/Editor: Seiritsu Ogura, Toshiaki Tachibanaki and David A. Wise, editors

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-62094-8

Volume URL: http://www.nber.org/books/ogura03-1

Conference Date: January 20-23, 2000

Publication Date: January 2003

Title: Introduction to "Labor Markets and Firm Benefit Policies in Japan and the United States"

Author: David A. Wise

URL: http://www.nber.org/chapters/c10300

Introduction

David A. Wise

This is the fourth in a series of Japan Center for Economic Research–National Bureau of Economic Research volumes dealing with population aging, economic systems, and economic behavior in the United States and Japan. The first three volumes—*Aging in the United States and Japan: Economic Trends* (1994), *The Economic Effects of Aging in the United States and Japan* (1997), and *Aging Issues in the United States and Japan* (2001)—focus on the challenges of an older population in these two countries, and on the aging-related influences of each country's economic and social institutions, public policies, and employment traditions.

Following up on this earlier work, this volume focuses more intensively on the employment policies in each country, including both general employment practices and more specific fringe benefit systems. Population aging, an older workforce, and the associated explosion in costs in both employer-provided and publicly supported retirement benefit programs affect every aspect of employment policy. The papers in this volume take an important step in relating these economic and demographic changes to employment practices and labor market trends in Japan and the United States, as well as to economic vitality and productivity more generally. The volume also highlights some common characteristics and important differences in employment policies and traditions between the two countries.

For example, Japan is widely recognized for offering long-term employment security with one firm, broad participation of employees at all levels in business decision making, and, in at least some industries, significant

This introduction was completed with the collaboration of Richard Woodbury.

David A. Wise is the John F. Stambaugh Professor of Political Economy at the John F. Kennedy School of Government, Harvard University, and the director for health and retirement programs at the National Bureau of Economic Research.

information sharing across business components. This volume devotes a chapter to each of these employment traditions in Japan and to examining how these employment traditions are evolving over time in relation to Japan's changing economic and demographic circumstances. The findings from these studies suggest a very gradual erosion of participatory employment practices in Japan and a higher degree of employment level flexibility in Japanese firms than conventionally assumed. And at least some of this evolution in traditional employment practices in Japan results from the economic slowdown of the 1990s and the aging of the workforce in Japan. These employment practices, as well as the interactive dynamics of youth and senior labor market opportunities, are explored in chapters two through five.

The increasing cost of employer-provided fringe benefits and the economic incentives associated with fringe benefit systems represent another important employment-related issue in Japan and the United States, and this issue is addressed in chapters six through thirteen. Trends, economic incentives, and potential innovations in a number of specific benefit programs are considered.

Four of the studies focus on health care and employer-provided health benefit programs. Chapter six looks at the potential for stronger demand-side incentives to contain health care costs, focusing on an innovative "medical savings account" approach to employee health benefit provision in the United States. Chapter nine focuses on the disproportionately large amount spent on prescription medications in Japan relative to the United States and how the current health benefit system in Japan may have encouraged distortions in pharmaceutical spending by as much as 50 percent. Chapter ten looks at the potential for investments in preventive health care both to decrease the long-term cost of acute health care services (by decreasing hospitalizations, for example) and to reduce work absenteeism. Chapter seven looks at how private health insurance supplements to publicly supported health care programs affect the overall use (and cost) of health care services, based on a worldwide view of health policy. Each of these studies has implications for the design of health benefit policies and for the cost of employer-provided health benefits as the population ages in Japan and the United States.

The economic characteristics and incentives of other fringe benefit programs are also explored in the volume. For instance, chapter eight shows how the structure of firm pension plans in the United States has a large effect on workers' retirement decisions, as does the amount of money saved in both employer-sponsored retirement accounts and nonretirement accounts. This has important economic implications, not just for the individuals choosing retirement, but also for the larger economic vitality of a country with increasing numbers of retirees. Chapter eleven explores similar issues of welfare and retiree benefits in Japan, and the role of the employer in supporting such benefits. Finally, chapters twelve and thirteen deal with the economics of providing benefits to part-time workers, the economics of vacation benefits, and how unionization affects worker time off. The volume as a whole compiles these analyses of employee benefit programs to highlight the trends, economic incentives, and cross-national differences between Japan and the United States.

The volume begins (in chapter one) with a big-picture perspective of economic growth and decline in Japan and the United States over the past several decades and the factors that may have contributed to each country's successful economic results in different periods of recent history. It lays a broad foundation for the more focused discussion of individual employment practices and firm benefit policies that follow. Together, the studies in the volume provide a diversity of new information about employment practices and firm benefit policies in these two economies.

The remainder of this introduction previews the individual studies in the volume, drawing heavily on the authors' descriptions of their own papers.

Employment Practices

In "Changing the Guard: The Rise of the United States to Peak Capitalist Economy," Richard B. Freeman assesses the spectacular performance of the U.S. economy during the 1990s and relates it to the economic performance of Japan in the 1970s and 1980s. What is it, he asks, that makes different economies successful at different times?

"There are some similarities in the institutions, policies, and economic developments that made the United States the 1990s' peak economy and those that made Japan the 1980s' peak economy," says Freeman. The most notable similarity is the importance of variable pay in the two economies. Bonuses became a common form of variable pay in Japan in the 1980s, with the amount of bonuses rising in booms and falling in recessions. A similar move to variable pay in the United States occurred in the 1990s. According to Freeman, "variable pay should increase employment and reduce fluctuations in employment, and it thus may have contributed to the peak performance of both economies in the two periods."

But Freeman suggests that the differences between the United States and Japan are more striking than the similarities. For example, workers change jobs frequently in their early career years in the United States, whereas workers in Japan typically stay with one firm throughout their careers. Substantially more immigration and entry of women in the labor force has occurred in the United States than Japan. Japan has a more equalized distribution of income, whereas earnings in the United States are more unequal. The United States encourages new business development and has lenient bankruptcy laws, whereas Japan targets government support toward helping companies maintain their employment. Perhaps most important, Japan saves and invests and runs trade surpluses, whereas the United

States carries substantial private domestic debt and a massive trade deficit. “In short,” says Freeman, “the overall picture is that these are economies with very different institutions, policies, and roads to full employment.”

So what is it that has made both economies successful at different times in recent history? Freeman offers two hypotheses. “The diverse capitalism hypothesis interprets the evidence as reflecting a multipeaked landscape with different institutions producing more or less economic success in different periods. In a multipeaked world, there is no real peak economy and thus it is no surprise that one economy does better in one period and another in another period. The adaptionist hypothesis makes the stronger claim that Japanese institutions and policies fit the 1980s environment whereas U.S. institutions and policies fit the 1990s environment.” Although Freeman offers some perspective on both hypotheses, he looks toward the future to better assess their relative merits, and he predicts the likely occurrence of another “changing of the guard” ahead.

Following this broad overview of employment traditions and economic performance in Japan and the United States, the remainder of the volume focuses in a more targeted way on particular employment practices or firm benefit programs. The next group of studies considers four aspects of employment in Japan: the participation of employees in all levels in business decision making; information sharing across business divisions; the interactions between an older population and an aging labor force, on the one hand, and youth employment, on the other; and the ability of firms in Japan to make labor cost and employment adjustments despite the long-term career stability of Japanese employees.

Takao Kato considers “The Recent Transformation of Participatory Employment Practices in Japan.” The broad participation of employees in business decision making in Japan was at one time modeled around the world as an innovative approach to business management. Kato looks at how the 1990s slowdown in the Japanese economy has affected participatory employment practices in Japan. He finds some evidence of a decline and some adjustments in how participatory practices are being applied in firms, but he concludes overall that participatory employment practices appear to be surviving in general in the economic slowdown in the 1990s.

From a historical perspective, Kato points out how the relatively higher job security and strong group cohesiveness of Japanese workers in large manufacturing firms in the postwar period created an environment favorable to successful employee participation. This was enhanced by relatively more rapid and stable growth in the Japanese economy of the postwar period. As a result of this favorable environment, particularly in manufacturing, it is perhaps not surprising that participatory practices spread widely in Japan. Indeed, these practices became the hallmark of “Japanese management,” which has been inspiring (or necessitating in some instances) many corporations elsewhere in the world to experiment with employee involvement and labor-management cooperation in recent years. In short, the postwar Japanese economy (especially in manufacturing) clearly represents one of the most important examples of experimentation with participatory employment practices.

The economic slowdown in the 1990s and a rapidly aging workforce have allegedly been eroding the aforementioned participation-friendly environments. Kato suggests that a closer look at the recent Japanese experience with participatory employment practices will help us better understand two key questions regarding participation: (a) what are the conditions under which participatory employment practices are best introduced and best sustained, and (b) in what way participatory employment practices will need to evolve when external environments change. To address these questions, Kato has analyzed both quantitative data from national surveys and qualitative data from his own field research on evolving employment practices in the 1990s.

Among the results, Kato finds evidence of complementarities in participatory employment practices that have served to protect participatory practices over time. Terminating a single practice (such as financial participation in business performance, or information sharing, for example) may not only eliminate its own positive effect on worker productivity but also reduce the positive effects of other practices at the same firm. In the extreme case, the termination of a single practice may jeopardize the whole system of employee participation and labor-management cooperation. These complementarities appear to have deterred management from any major steps back from participatory practices.

This is particularly true in large unionized firms. Such Japanese firms appear to be responding to the economic slowdown in the 1990s and the recent financial crisis in particular by fine-tuning the existing practices, not by dismantling them. Even in these firms, however, there are early signs of change, such as a decreasing number of full-time union officials, and overloaded work demands that prevent union officials from resisting management initiatives. In small to medium-sized firms with no union, Kato finds much more evidence of management's trying to weaken employee participation. Thus, with potentially decreasing union representation at large firms, and a growing number of small and medium-sized firms without unions and with less participatory environments, the participatory traditions of employment in Japan may well have started a very gradual decline.

Information sharing within firms is one of the participatory employment practices that has been applied in Japan. In "Determinants of the Shadow Value of Simultaneous Information Sharing in the Japanese Machine-Tool Manufacturing Industry," Hiroyuki Chuma analyzes the role of information sharing in enhancing productivity in the machine-tool industry. The machine-tool industry in Japan became the world output leader in 1982 and has maintained this leadership ever since. Chuma makes the case that information-sharing practices in this industry contributed importantly to its success.

There have been a number of technological advances in Japan that relate to the machine-tool industry, and there have been spillover effects from other manufacturing industries that related in important ways to the market for machine tools. Among the most widely recognized technological and cross-industry developments are the growth of the Japanese auto industry, the leap forward in mechatronics manufacturing, the growth of precision-parts manufacturing, and the basic development of foundry engineering technology. What Chuma emphasizes is the complementary role of "human-related" factors. He gives special attention to the existence of simultaneous and formal information-sharing systems between production workers and design and development engineers.

Chuma's analysis is based on both field research and survey results. The field research reveals that the machine-tool industry employs a simultaneous and rather egalitarian information-sharing system linking production workers and design and development engineers. The computerized numerical control (CNC) machines used in this industry are so complex, according to Chuma, that without close collaboration among the various professionals, mechanical designers could not effectively design the details of the production machines while at the same time keeping lead times short. Information sharing is a critical aspect of the production process.

The importance of information sharing is identified generally in the field interviews, and it is statistically confirmed using the survey data. Indeed, Chuma says, the statistical analysis predicts that simultaneous information-sharing systems are more likely to be implemented by machine-tool manufacturers that retain highly skilled assemblymen and machinists, produce (CNC) lathes or machining centers (MCs), and have more than 100 full-time workers. The implication is that information sharing has increased importance to productivity as the complexity of the manufacturing process increases.

In many countries, there is a concern that aging populations may change the employment opportunities of youth. For example, some analysts speculate that increased retirement at older ages will create new opportunities for workers at younger ages. Who will do the work, it is sometimes asked in the United States, when the baby boomers retire? Although there are clearly interactions between the labor market for young and older workers, any potential excess demand for young workers does not appear to have occurred in Japan, at least not yet. In fact, just the reverse has been happening. In "Who Really Lost Jobs in Japan? Youth Employment in an Aging Japanese Society," Yuji Genda analyzes the recent *decline* in youth employment in Japan. Genda concludes in his study that declining youth employment is primarily due to a drop in demand for products (and workers) in Japan, but that the delay in retirement of older workers is an important contributing factor in aggravating youth unemployment.

In analyzing recent trends in employment in Japan, Genda also points to the side effects of government policy. Following extensive corporate restructuring in Japan, the Japanese government, media, labor unions, and even employers have made a big deal out of the job losses of older, and especially white-collar, workers. Consequently, in 1999, in response to this perceived crisis, the Japanese Ministry of Labor introduced emergency measures to create employment opportunities for older people. By stimulating opportunities for older workers, however, the government may have at the same time caused a reduction in the employment opportunities of youth.

Genda also makes the case that the change in government policy may have been an overreaction. Indeed, Genda questions whether the employment situation for middle-aged and older white-collar workers was, in fact, deteriorating as much as Japanese newspapers claimed. According to Genda, only 70,000 out of 3 million unemployed persons (about 2 percent) were aged 45–54 and had a university education in 1999. This contrasts with the very large proportion of newly unemployed young people, and especially those without a college degree. The relative unemployment of middle-aged and older college graduates has not increased to the degree claimed, Genda says.

Genda's research illustrates the important interactions between youth and senior labor markets—how policies designed to affect employment opportunities for one group can have secondary effects on the other. Genda concludes that a decline in overall labor demand in Japan largely resulted in reduced employment opportunities for youth, whereas the employment of middle-aged and older workers was safeguarded. Indeed, a large part of the contraction in the labor demand for younger workers has been due to job displacement by the delayed retirement of a graying workforce, especially within large firms in Japan.

The tradition of long-term job security in Japan implies some potential impediments to downsizing at Japanese firms, or at least raises the question of how companies in Japan respond to a decline in demand for their products. Yoshifumi Nakata and Ryoji Takehiro consider this issue in "Total Labor Costs and the Employment Adjustment Behavior of Large Japanese Firms." The study looks at how firms absorb demand fluctuation in Japan, focusing on the role of adjusted work hours, the inflow of new workers, the retirement of older workers, and layoffs. Nakata and Takehiro present evidence that substantial employment variation can (and does) take place in Japan—even without layoffs—through adjusted work hours, restricted inflow of new workers, and stimulated retirement of older workers. Thus employment and labor cost adjustments at Japanese firms are much more responsive to demand fluctuations than conventionally assumed.

The study analyzes employment adjustments using a twenty-five-year firm-level panel data set for thirty-three large Japanese firms in three industries: automobile manufacturing, department stores, and supermarkets. The data set includes consistent employment data on regular full-time workers. Nakata and Takehiro apply the data set to an empirical employment adjustment model, and the calibrated model is found to explain very well the employment adjustment behavior of leading Japanese firms. The model is applied separately to the data from each industry, as well as for all three industries combined.

In both the industry-specific and industry-consolidated results, Nakata and Takehiro find negative relationships between the adjustment parameter and the output and price elasticities of employment. They interpret this negative relationship as evidence that firms compensate for slow *long-run* labor market adjustments by making faster *short-run* employment adjustments. The supplementary analysis of work hour adjustments at eleven of the firms in the database reinforces this interpretation. Indeed, the inclusion of work hours improves the overall fit of the employment adjustment model for most firms.

Nakata and Takehiro conclude that leading Japanese firms do make significant employment adjustments even in an environment of long-term job security: "Firms adjust employment levels and work hours in response to fluctuations in output and the relative price of labor."

Fringe Benefits and Labor Markets

Three papers address aspects of fringe benefits in the United States: the potential for medical saving accounts to support employer-provided health insurance, the economic implications of supplementing public health insurance with private insurance, and the relationship between employer-provided pension benefits and employee retirement decisions.

Only a few years ago most private health insurance plans in the United States paid for care on a fee-for-service basis, with any limits on expenditures provided through typically small copayments and deductibles. The rising cost of medical care encouraged a progression to managed care plans, and now the majority of plan participants are enrolled in plans that to some extent limit cost through supply-side restrictions. But health care costs are rising rapidly again, even in managed care environments. In "Individual Expenditures and Medical Saving Accounts: Can They Work?" Matthew J. Eichner, Mark B. McClellan, and I consider an innovative approach to health insurance that reintroduces demand-side cost containment characteristics and improves the efficiency of individual spending decisions for health care.

The plan we consider is the Medical Saving Account (MSA). Most

Americans have very little financial asset savings. This has limited the practical feasibility of high-deductible "catastrophic" health insurance, as traditionally structured, despite the efficiency benefits of such policies. Medical saving accounts would address this limitation. By providing a savings account that could be used to pay for substantial medical costs, without causing major short-term disruptions in family budgets, the MSA is intended to make insurance plans with high deductibles and copayments practical for a larger number of Americans. The typical plan would allow tax-free contributions to an MSA. Then, at retirement, the MSA balance could be used for general financial support, much like an individual retirement account (IRA) or 401(k) savings plan. An MSA thus combines the desirable features of catastrophic coverage for reducing medical expenditures with a mechanism that creates a reserve for paying individual expenses.

In the paper in this volume, we analyze an important potential impediment to the practical application of MSA plans. Specifically, MSA plans might not be practical if the same individuals have high medical expenditures year after year. In this study, we explore the likely variation in MSA balances that would occur over a working career, based on actual patterns of individual health care spending over time.

The key results are in the form of simulations, based on model estimates. Under the illustrative plan we have simulated, most employees would approach retirement with a substantial proportion of MSA contributions remaining in the account. Only a small fraction would approach retirement with very small balances. Based on our illustrative plan, if investments of MSA assets were in equities, fewer than 10 percent of participants would retire with a balance in their MSA plan of less than they had contributed—even after paying for health care expenses throughout their working careers. Over half of participants would accumulate MSA balances greater than 300 percent of their contributions. If investments were in bonds, balances would be much lower. In this case about 10 percent of workers would retain less than 50 percent of contributions. Thus, we conclude that persistence of medical expenditures seems not to present an overriding obstacle to the adaptation of MSA plans.

All countries insure a significant part of the population through public insurance. However, not all services are covered publicly, or the services covered may not be of the highest quality. A central question for countries designing medical care systems is whether to allow people to supplement the public insurance policy, and if so under what restrictions. An important aspect of this question is how the supplementary coverage changes medical care decisions, including decisions made about care that is already covered under the public benefits. For example, the supplementary coverage could increase or decrease the cost of the public program, depending on how the public and private programs interact with one another. David M. Cutler considers these issues in "Supplementing Public Insurance Coverage with Private Coverage: Implications for Medical Care Systems."

To better understand the issue, Cutler categorizes three types of supplemental health insurance coverage. The first, and most straightforward, form of supplemental insurance is for services that are not covered under the public insurance system. The second type of supplemental insurance is for the cost sharing required in public insurance systems. Some public health insurance systems require high beneficiary copayments. If it is allowed, recipients of public insurance may purchase secondary insurance, which pays for this cost sharing. The third type of insurance is for services that are covered under the public plan but for which private provision might be preferred to public provision. Because of the tight budget constraints on service availability, some countries have waiting lines for access to specialty services. Some people purchase private insurance to see doctors outside of the public system, in effect jumping the public queue.

Each category of supplemental health insurance has different economic implications. Most countries do allow supplemental insurance for services not covered under the public program—Cutler's first category. Under these types of policies, people may use more or less of the publicly provided health care services, depending on whether the covered and uncovered services in the public program are complements or substitutes. Public spending may rise or fall as a result. Further, the availability of private insurance might reduce poverty among people, saving money on health and other support services.

Insurance for the cost-sharing component of the public system—Cutler's second category—is more complex. On the one hand, allowing people to purchase such insurance increases welfare by reducing exposure to financial risk. On the other hand, such insurance creates moral hazard, leading people to use more medical care than they would without the insurance. This increases the cost of the public system. Because these public costs are not passed back to individuals purchasing private insurance, these policies are in effect subsidized by the public sector, making the insurance too generous. Whether supplemental policies to reduce the cost sharing are welfare improving or welfare decreasing depends on whether the gains from risk reduction are greater or smaller than the losses from increased moral hazard.

Supplemental insurance for queue jumping—the third category—is perhaps the most controversial form of insurance. Some countries, such as Canada, prohibit physicians from accepting payment for services that are covered under the private sector. The government is concerned that if such payments are possible, the rich will get more services and the poor will get less. But this concern ignores supply effects of the supplementary coverage. If increased demand by those with supplemental insurance leads to increased supply of resources, the total resources available for the poor may increase as well.

In addition to the discussion of economic incentives, Cutler's paper includes some empirical findings about the Medicare program in the United States, where supplemental insurance is extremely common. About 85 percent of Medicare recipients have some supplemental insurance. In the United States, queue jumping is not important (because supply is essentially unlimited), but the insurance for cost sharing and uncovered services (particularly prescription drugs) is very important. Cutler estimates that people with supplemental insurance coverage paying for Medicare cost sharing spend about 50 percent more on health care than people without supplemental insurance coverage—a sizable moral hazard effect of the supplementary coverage. Cutler does not find significant effects of covering prescription drugs on Medicare spending. In total, therefore, Cutler concludes that allowing supplemental insurance leads to substantial cost increases for the public sector.

Employer-provided pension benefits are an important source of retirement support in the United States. However, the typical defined benefit pension plans offered by employers in the United States also induce earlier retirement than would occur without the plans. In "Option Value Estimation with Health and Retirement Study Data," Andrew Samwick and I begin to explore how pension plan provisions, and other individual attributes, affect retirement decisions, using data from the Health and Retirement Study.

In most defined benefit pension plans, there is an extremely uneven accrual of pension benefits over a working career. Vesting rules, ages of eligibility for benefits, service credit rules, early retirement provisions, and the adjustment formulas used to determine pension benefits for retirement at different ages—all affect the pattern of pension accrual. This leads to large jumps in benefit entitlement for working an additional year at some ages, small increases at other ages, and very often a loss in benefits for working beyond certain ages.

To most accurately estimate the effect of pension provisions on retirement, it is therefore critical to consider the specific provisions of the plans and how they relate to the pension accrual patterns for an individual employee, based on that individual employee's wage and career service history. The Health and Retirement Study (HRS) is perhaps the first database in the United States that combines information on employment history, detailed and accurate earnings histories, and the detailed provisions of the employer-sponsored pension plan. The HRS also includes a diversity of other information about individuals that would be likely to influence retirement, such as health and functional ability, and the accumulation of assets in both retirement and nonretirement savings accounts. It therefore provides new opportunities to examine retirement in a very comprehensive way.

This paper does three things. The first is to describe the critical content of the HRS and confirm that these new data are important components of comprehensive analysis of retirement. The second is to make preliminary calculations of pension incentives and to estimate their effect on the probability of retirement, incorporating at the same time the effects of other nonpension characteristics on retirement. The third goal, by way of the first two, is to provide guidance that we hope will help analysts in other countries who may wish to conduct such analysis and indeed may wish to develop HRS-like surveys.

We show that when the financial incentives of pension plans are calculated over a sufficiently long time period, higher financial incentives to delay retirement predict lower retirement rates. However, pensions have a much larger effect on the decision to leave one particular firm than they do on the decision to leave the labor force entirely, as the pension benefits from one employer are still paid, even if a person continues working for another employer. So a sizable number of workers "retire" from one firm, with a pension from that firm, and then continue working with another firm. Thus the incentive effects of firm pension programs are somewhat different from the incentive effects of Social Security, which does not differentiate regarding whether an individual is working for one firm or another.

In addition to the effects of pensions on retirement, we also find that wealth influences retirement, whether wealth is measured by the present value of traditional pension benefits, by the accumulation of assets in retirement accounts, or by wealth in nonretirement assets. Finally, as expected, there is a strong effect of health status on retirement, particularly for the roughly 10 percent of the HRS sample reporting fair or poor health.

The U.S. papers are followed by five papers that address aspects of benefits programs in Japan: the cost of prescription drugs in health care benefit programs, the potential for preventive health care to better contain health benefit costs, the role of firms in providing welfare benefits, the economics of providing benefits to part-time workers, and the economics of vacation benefits and worker absenteeism.

Relative to other countries, a comparatively large portion of health care spending in Japan is for pharmaceutical expenses. For example, in terms of the per-patient costs of drugs, Japan spends more than three times as much as the United States. The importance of drugs in Japan seems to be most heavily concentrated among elderly patients for their outpatient care. Seiritsu Ogura and Takehiko Hagino consider the disproportionately high spending on pharmaceuticals in Japan in their paper, "Why Do the Japanese Spend So Much on Drugs?"

Among the reasons for high spending on drugs, Ogura and Hagino point to enormous distortions in the price regulation of drugs that have been generated over the last five decades. Although there is significant regulatory intervention in all aspects of the health care system in Japan, there are some distinct characteristics about the regulations on drug prices.

First, regulated drug prices vary by brand names, even if the drugs are chemically identical. In general, when the Japanese government purchases any other good or service, it has to observe a set of stringent procurement procedures that are designed to assure the lowest possible prices. With drugs, however, physicians are allowed to prescribe more expensive brand-name drugs even when cheaper alternatives are available. Second, the government sets the reimbursement (or retail) price for drugs based on wholesale prices almost eighteen months earlier, and they are fixed for the following two years. This lag time can create significant gaps between the reimbursed price and the price that would otherwise prevail in an unregulated market. Third, drug markets have been very tightly regulated and, at the same time, protected by high barriers to entry for new suppliers. The regulations concerning the introduction of new drugs, in effect, prohibit the entry into the drug market of new suppliers, and they make it easy for existing suppliers to establish noncompetitive prices.

In addition to the descriptive discussion of economic incentives in the drug industry in Japan, Ogura and Hagino present empirical evidence on the effects of these price distortions on resource allocation in the health care sector. The empirical work uses a new and comprehensive microdata set not previously available for statistical analysis in Japan. The authors estimate distortionary effects of between 20 percent and 50 percent of drug costs. They then show that the government's attempts to directly control drug prices have been ineffective, because drug companies have simply offset the price control efforts by offering alternative drug choices—what Ogura and Hagino call "drug switching" effects. And the economic incentives for drug switching are already strong, because of the built-in profit margins for "new" drugs that are given generous prices by the regulator.

The study as a whole suggests that the disproportionately high spending on pharmaceuticals in Japan is to a significant extent a result of the economic incentives in the pharmaceutical market and the use of higher priced pharmaceutical products, when identical or similar products could be prescribed at lower prices.

Preventive health care—such as routine checkups—is often mentioned as a means to reduce total health care expenditures, by identifying and addressing health care issues as they arise and before they become serious (and expensive) problems. By improving health, routine checkups may also reduce worker absenteeism and, as a consequence, increase worker productivity. On a more individual level, moreover, most would agree that routine checkups are just a good idea. But according to the 1995 *National Survey of Life,* administered by the Japanese government, only about half of

Japan's population undergoes health checkups. In "The Demand for Health Checkups Under Uncertainty," Tadashi Yamada and Tetsuji Yamada look at the characteristics of individuals that lead them to seek more or fewer routine checkups.

The study is based on a sample of about 630,000 observations from people in the twenty to sixty-four age group in the National Survey of Life, focusing in particular on those between ages thirty and sixty. Yamada and Yamada find a significant gender differential in the demand for health checkups even after controlling for other socioeconomic and demographic characteristics. This differential tends to disappear as age increases. Age is also a major determinant of health checkups. The type of health insurance coverage and the size of one's employer also affect the likelihood of a health checkup. Finally, Yamada and Yamada identify a strong negative correlation between the health checkup rate and the probability of becoming ill, as well as the duration of hospitalization.

In the short run, the authors find, health checkups increase medical expenditures. These expenditures are offset, however, by reductions in the incidence and duration of hospitalization. In other words, an individual who has had a health checkup has a much lower risk of being hospitalized than one who has not. Furthermore, if this individual is hospitalized, he or she is likely to have a shorter hospital stay. Thus, in the long run, checkups will reduce not only monetary expenditures, but also psychological burdens associated with illness and hospitalization. In conclusion, the author says: "This paper finds that health checkups constitute a highly cost-effective means of illness prevention within the context of the current comprehensive system of national health care. We must increase the relatively low health checkup rate of 56 percent in the twenty- to sixty-four-year-old population, if only because good health is, by itself, of great value."

In "The Role of Firms in Welfare Provision," Toshiaki Tachibanaki discusses the ways firms support welfare benefit programs in Japan, and how this role might evolve in the future. Firms in Japan support welfare provision in various ways. First, firms help finance public social security benefits by contributing to social insurance programs such as public pensions, unemployment compensation, and medical care. Second, firms organize together and manage their own system of welfare provision for their employees. Typical examples of this are enterprise pensions (or occupational pensions) and health insurance benefits. Third, large firms in particular often provide their employees with direct benefits, such as housing services and other nonstatutory welfare benefits.

The distinction between direct and indirect methods of welfare provision is particularly important, the author says. An indirect method implies that firms contribute to both employees and citizens who are anonymous from the firm's point of view. An example is a social insurance system, in which firms contribute to a pool of resources that supports the overall citizenry of the country, rather than the employees of any one firm. A direct method implies that firms contribute directly and exclusively to their own employees. Thus, firms can identify the actual beneficiaries of the welfare provision because they support only their own employees. Typical examples are enterprise pensions, health insurance systems, and housing services. An interesting question is whether such direct and indirect methods have different effects on workers' behavior, welfare system management, or firms' economic performance.

In addition to elaborating on these various forms of benefit provision, and their economic characteristics for the firm, the author also looks at the potential future evolution of the firm's role. For instance, he considers the possibility of a transformation of nonstatutory fringe benefits to wage payments, a reduction in the statutory social security contributions of firms, and the introduction of a progressive expenditure tax to compensate for such a reduction.

In many countries, benefit provision for part-time workers is an important labor market concern. Part-time work has expanded rapidly in Japan in the 1980s and 1990s. According to the Employment Status Survey, the number of female part-time workers increased from 3.9 million in 1982 to 8.5 million in 1997. In light of this expansion, labor market policies affecting part-time workers have generated increased interest. In "Fringe Benefit Provision for Female Part-Time Workers in Japan," Yukiko Abe considers this issue.

Although Japan has universal public pension and health insurance coverage, the benefits are provided through a somewhat more complicated interaction of employee benefit programs (mandated by the government), eligibility for spousal benefits, and regional plans for self-employed and nonworking individuals. As a result of these multiple programs, how one receives benefits and who pays for those benefits are closely related to an individual's employment status. The demographic group most often in the "gray" area in this respect in Japan is women who work part-time. Some may be covered as employees, some may be covered as spouses of full-time employees, and some may be covered as nonworking individuals—all depending on the nature of their employment and the characteristics of the various benefit programs. In this paper, Abe focuses on women who work part-time and provides new empirical evidence on their fringe benefit coverage.

Social insurance programs in Japan (in this case, public pension, health insurance, and employment insurance) do not require all part-time workers to enroll. Participation is only necessary for workers with sufficiently high working hours or earnings. It has been pointed out that many married women working part-time do not participate in employer-provided plans but are still covered by the spousal provisions in their husbands' benefit programs. In these situations, neither income taxes nor social security taxes are collected out of the wife's earnings, but she still receives benefits. This raises questions of both efficiency and equity, says Abe.

In this study, using microdata on part-time workers, Abe examines the enrollment patterns of female part-time workers in employment insurance (EI) programs, public pensions (EP), and employer-provided health insurance plans. The conditions for participating in EP and employer-provided health insurance are the same (for those younger than sixty-five): Part-time workers who work thirty or more hours are required to enroll in public pension and employer-provided health insurance. The coverage for EI is wider: Workers who work more than twenty hours per week or earn 0.9 million yen or more have to participate.

Abe hypothesizes that the financial incentives in the current system will induce less direct benefit participation among married women and older workers, because these demographic groups are more likely to receive benefits already through alternative programs. She finds that, conditional on satisfying the hours and earnings conditions mandating participation in employees' pensions and health insurance, married and older female workers are no less likely to participate than others. However, married and older female workers who do *not* meet the mandatory participation conditions are significantly less likely to participate, just as the financial incentives would suggest. Abe also notes an overall increase in participation in social insurance programs by female part-time workers between 1990 and 1995.

Vacation time is another important fringe benefit in most industrialized countries. In "Unions, the Costs of Job Loss, and Vacation," Fumio Ohtake explores the relationship between unionization, on the one hand, and the cost of vacations and other worker absenteeism (what Ohtake refers to as "bad" vacation time) on the other. In the terminology of the study, good vacations are paid holidays, sick leaves, or other legally contracted vacations. Bad vacations consist of worker absenteeism, shirking, and other absences without authorized leave. Although the loss in worker productivity is somewhat larger for bad vacations, the distinction between fully authorized time off and other worker absenteeism is apparently weak in Japan.

Ohtake makes the case that unionization is an important factor in worker decisions about how much time off to take. He argues, specifically, that workers represented by a union will feel greater job security and will therefore take more time off than workers not represented by a union. Because unions reduce the threat of job loss (by making it more difficult for employers to dismiss workers), vacation time is less responsive to such threats in unionized firms than in nonunionized firms. Ohtake tests this hypothesis using data from the 1985 and 1993 *General Survey on Working Hours and Conditions in Japan,* and the findings support his supposition.

Ohtake relates these findings to mainstream economic models of efficiency wages, the mechanisms for worker discipline, and the ways employment practices are applied differently to unionized and nonunionized firms in Japan. According to Ohtake, since Japanese case law severely restricts unionized firms from dismissing workers, the simple worker discipline model based on dismissal does not apply in Japan. Instead, unionized firms motivate workers using more costly monitoring and merit pay systems than nonunionized firms. In nonunionized Japanese firms, however, efficiency wages and the threat of dismissal may have much larger applicability. Thus, it may be more appropriate to characterize the Japanese labor market as a three-sector market, with a unionized sector of full-time workers, a nonunionized sector of full-time workers, and a part-time workforce—each governed by different employment practices.